

# PACIFIC COASTAL SALMON RECOVERY FUND

## FISH PRODUCTION ASSESSMENT ON THE WARM SPRINGS RESERVATION

2000-2002

Presented By: Bob Spateholts, Fish Production Biologist  
Confederated Tribes of the Warm Springs  
Reservation of Oregon

# SHITIKE CREEK SPRING CHINOOK SUPPLEMENTATION

- Personnel
- Equipment
- Adult Outplants
- Carcass Outplants

# Transport Tank Purchased With PCS Funding

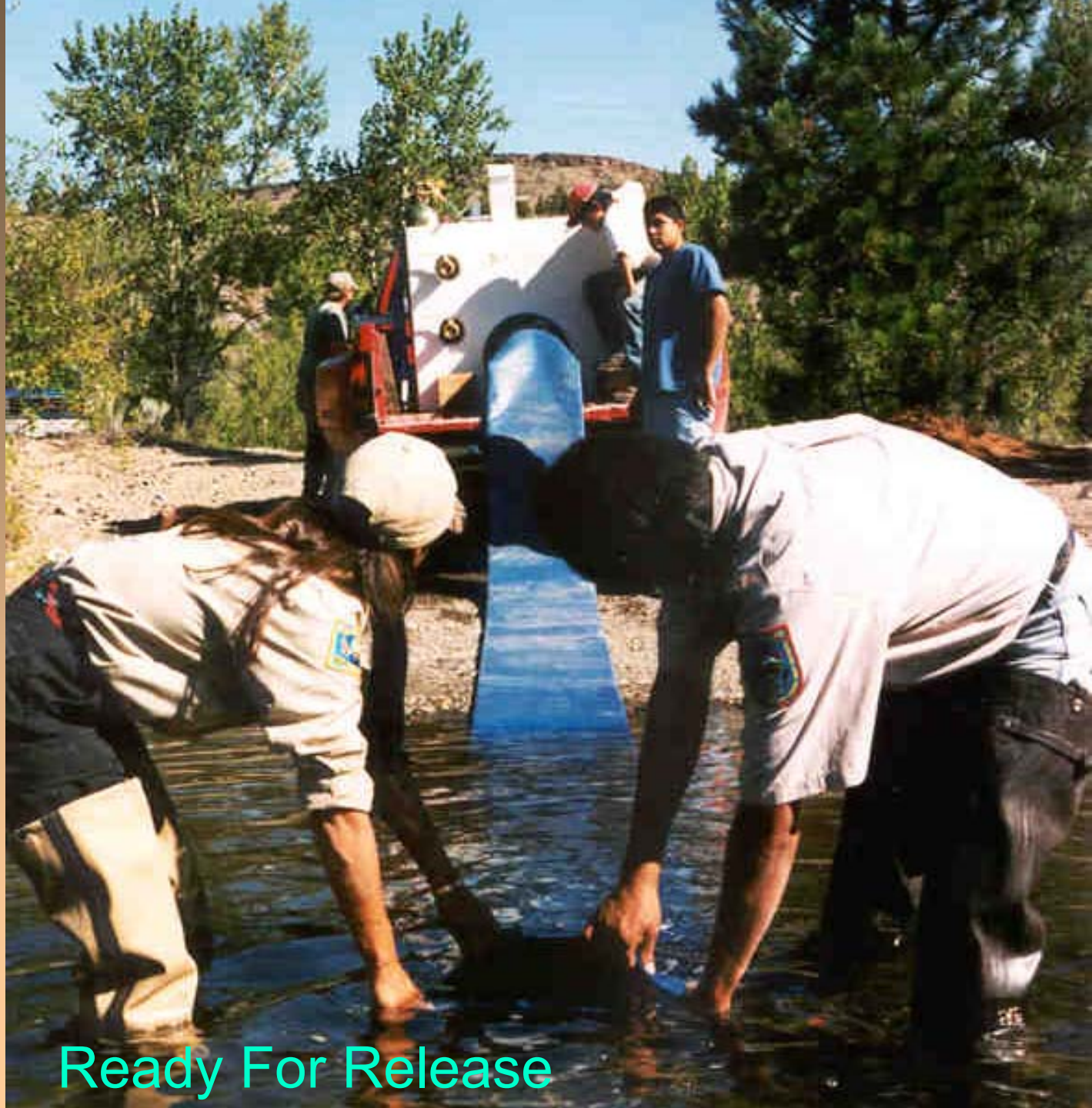




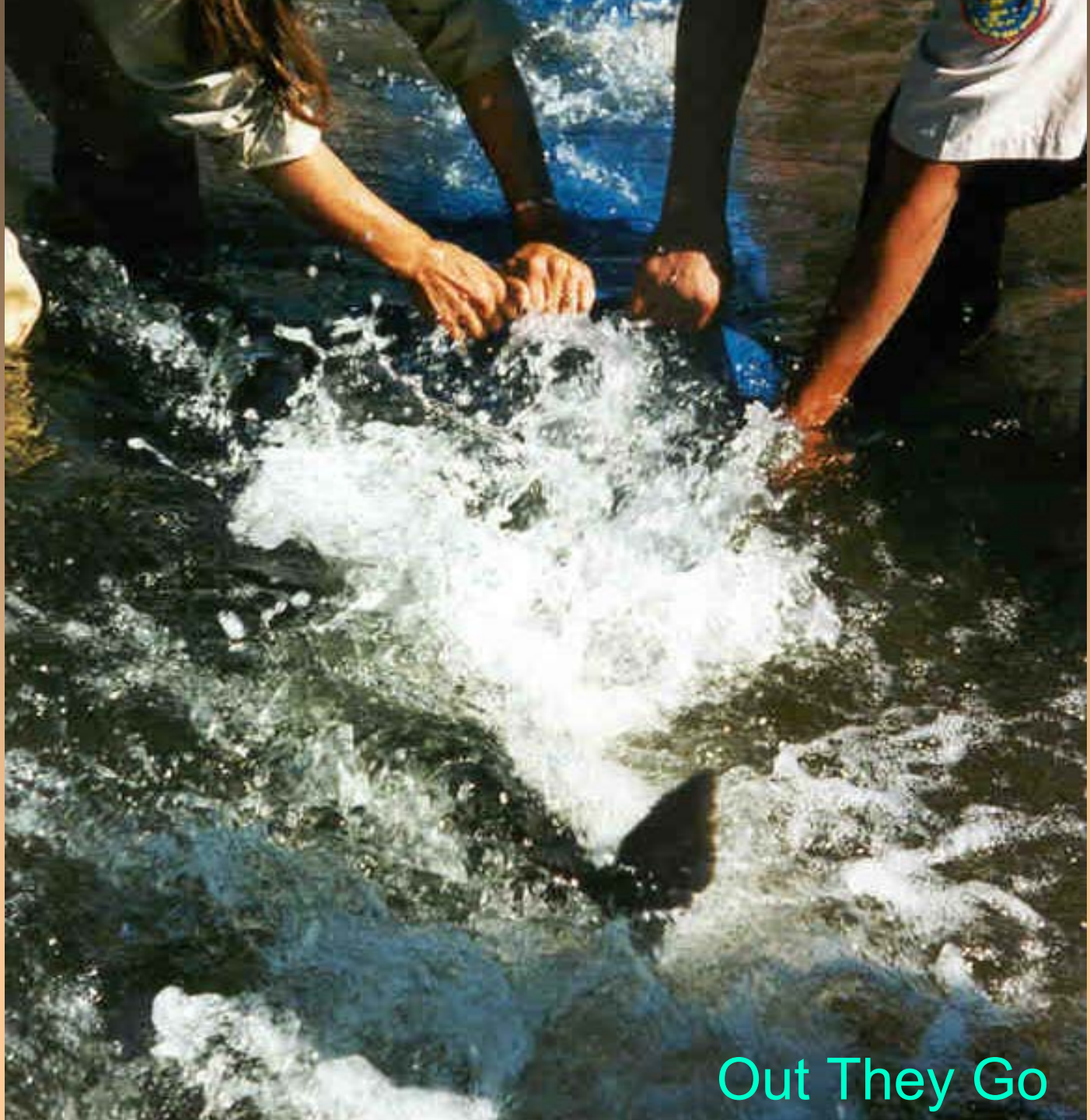
Outplant Adults Held at WSNFH to  
Just Before Spawning




25 Fish Per Load, 5 Release Sites



Ready For Release



Out They Go

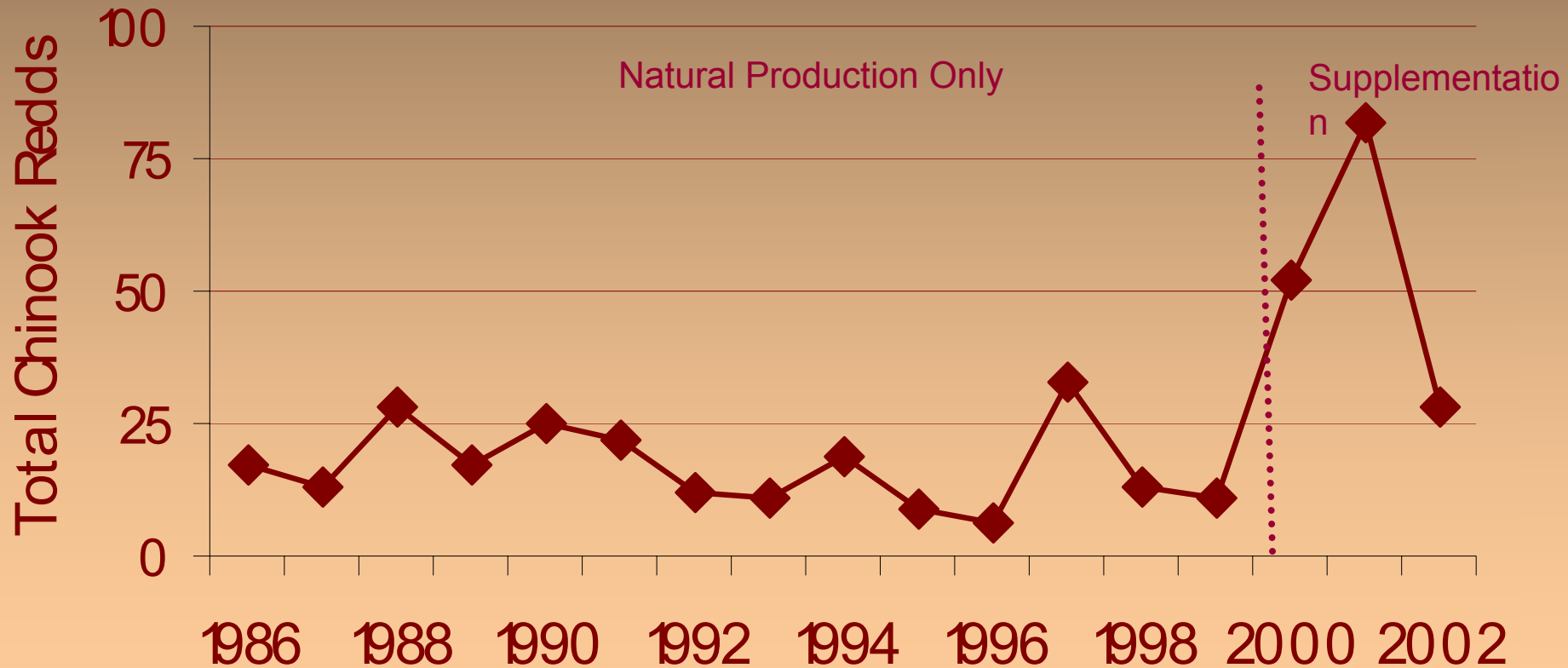


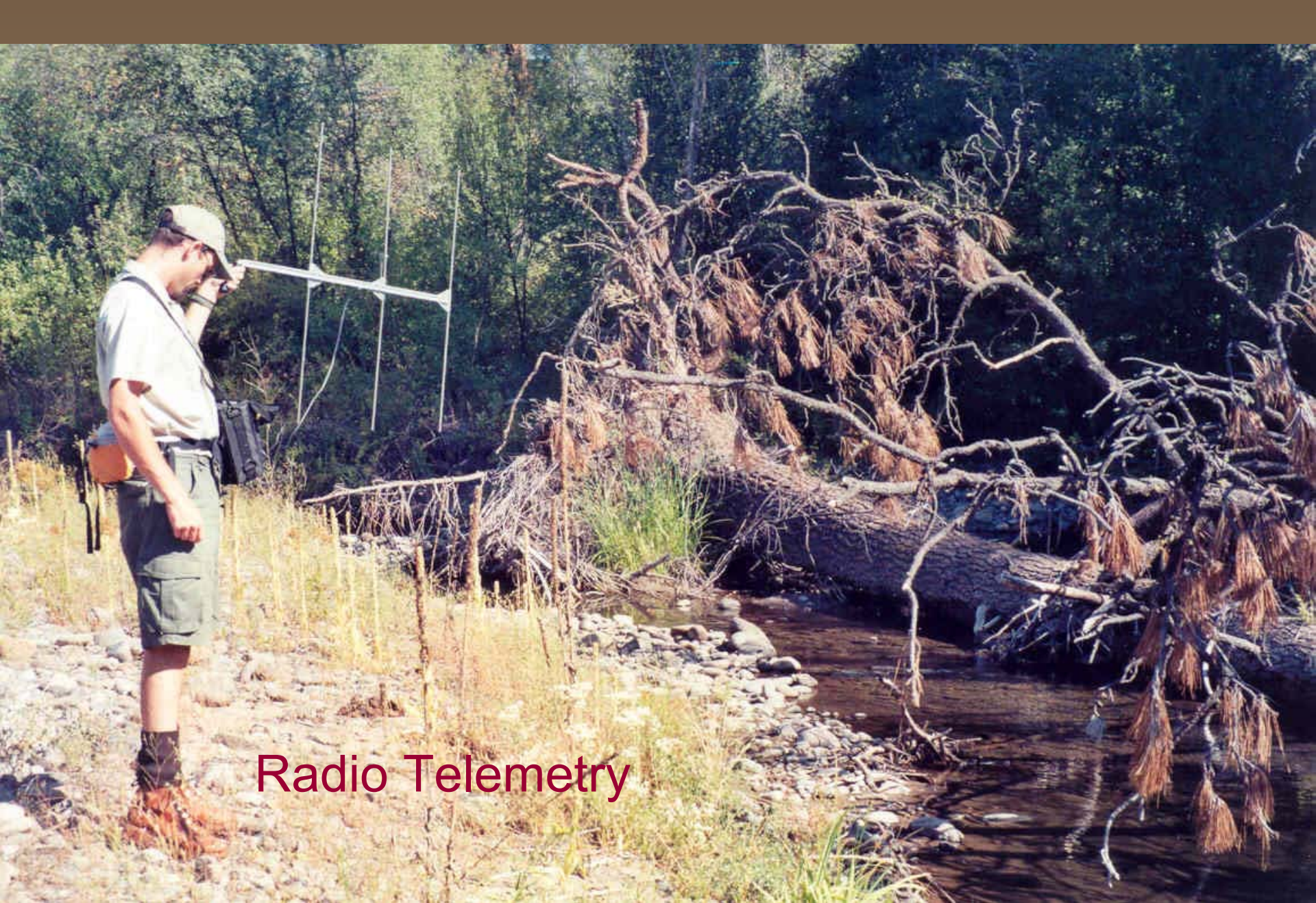
An underwater photograph of a riverbed covered in smooth, rounded rocks of various sizes and shades of brown and tan. The water is clear, and several fish are visible swimming over the rocks. One fish is prominent in the lower left, swimming towards the right. Another fish is visible in the upper right, and a third is in the center. The lighting is natural, creating soft shadows on the rocks.

Year	#Outplanted
2000	159
2001	200
2002	70

# Shitike Creek Spring Chinook Redds

## 1986-2002





Radio Telemetry

# Carcass Outplants





# NATURAL PRODUCTION ASSESSMENT

- ODFW Contract
- Snorkel Surveys
- Adult Weir
- Redd Counts
- Juvenile Migrant Traps



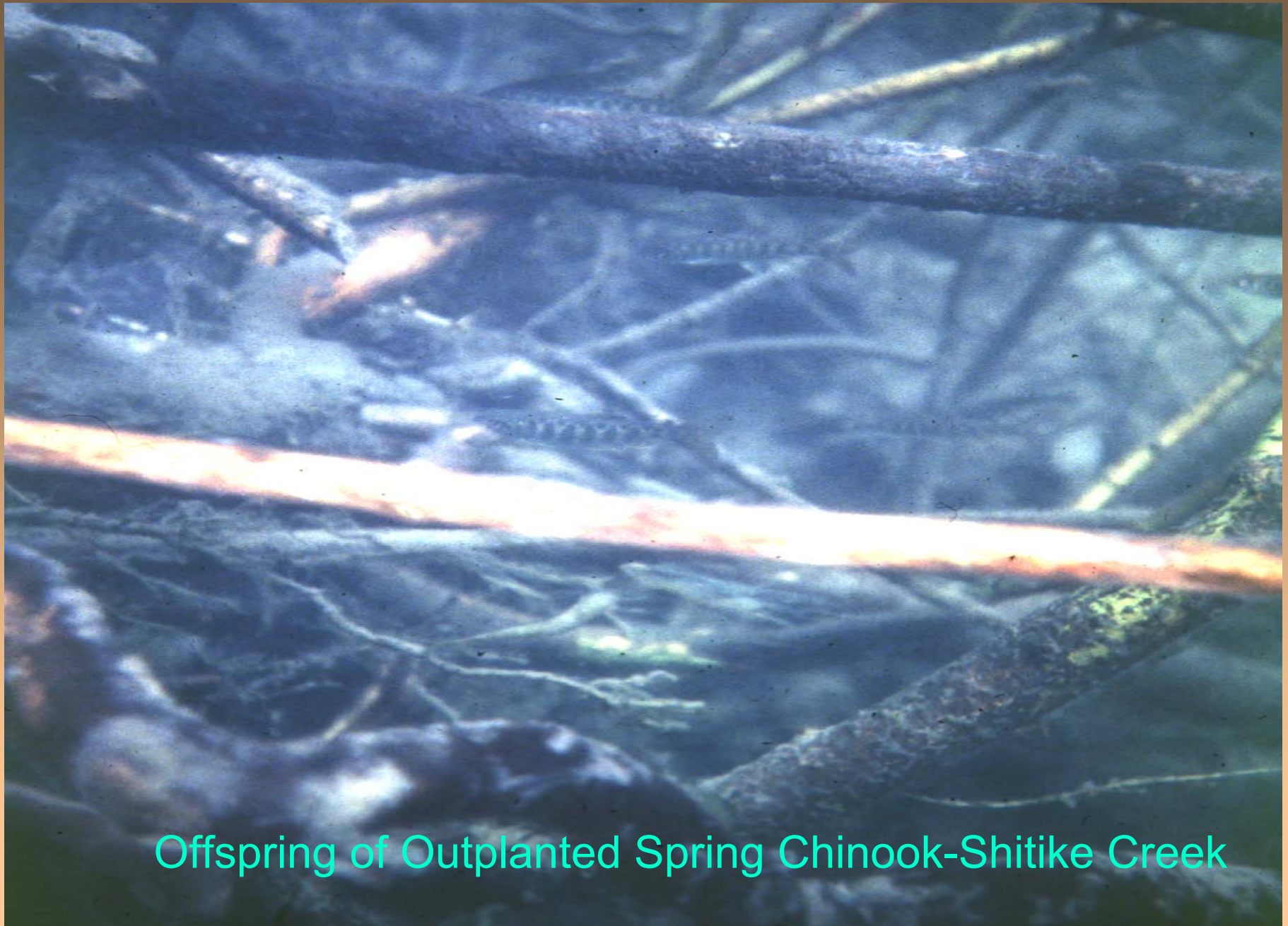
Screw Traps Enumerate Juvenile Production  
From Warm Springs River and Shitike Creek

Shitike Creek  
Juvenile Bull Trout





Snorkel Surveys  
Of Fish Abundance



Offspring of Outplanted Spring Chinook-Shitike Creek

## Seining to Verify Snorkel Estimates



Electrofisher and Training  
Course Funded by PCS



A photograph of a weir structure in a creek. The weir is made of corrugated metal sheets supported by wooden posts. The surrounding area is filled with bare, tangled branches and some green vegetation. The water is visible behind the weir.

Shitike Creek Adult Weir

## Spawner/Redd/Carcass Surveys



# WATERSHED PROJECT MAINTENANCE

- Repair Riparian Fences
- Technician Time
- Materials

Over 20 Miles of  
Riparian Fence



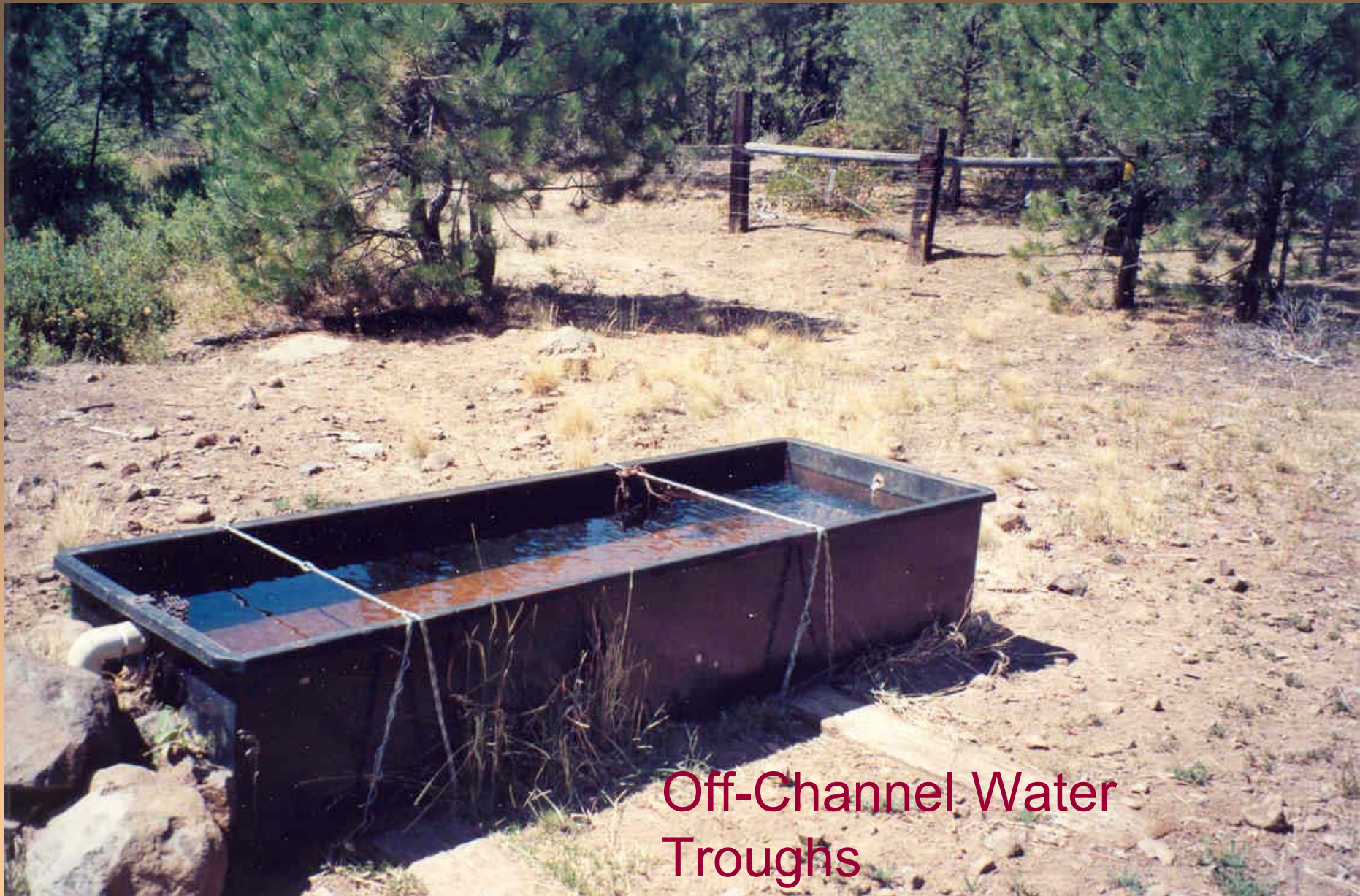
IPARIAN ENHANCEME  
FENCING PROJECT

Improvements :  
Walk-Throughs,  
Gates  
Cattle Guards



# Solar Powered Water Jacks





Off-Channel Water  
Troughs

# WSNFH RACEWAY COVERS

- Identified as Needed in Hatchery Operation Plan
- Purchased With PCS Funding
- Installed by Tribal, Fish and Wildlife Service and Salmon Corps Labor



Installing Brackets



Greenhouse Frames



Covers Installed